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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,867	09/29/2003	Guy Rousselin	1013-029	5392

22429 7590 09/23/2004

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EXAMINER

MACK, COREY D

ART UNIT PAPER NUMBER

2855

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,867

Applicant(s)

ROUSSELIN, GUY

Examiner

Corey D. Mack

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 12, 13 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 9, 11, 14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/2/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the flow detector and fluid flow adjuster must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claims 2, 12, 13 and 18 are objected to because of the following informalities:
- A. Claim 2 the limitation "the disk" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- B. Claim 12 recites the limitation "precision holes" in line 4. There is insufficient antecedent basis for this limitation in the claim.
- C. Claim 13 recites the limitation "the disk" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.
- D. Claim 18 recites the limitation "orifices" in line 1. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmons (US 2,805,573).
- A. With respect to Claim 1, Emmons discloses a flowmeter comprising a fluid inlet; an upper inlet body including a fluid inlet tube 12 (See Fig. 1); a flow detector including a vertical conical tube 14 including a ball 18 and a fluid circulation tube 15; and, a lower body arranged for enabling the fluid to exit through it, an adjuster for the fluid flow 20, a flow outlet tube 15, the upper fluid body being fixed to the lower fluid outlet body, flow meter including an inlet tube, a flow measurement tube 14 communicating with the inlet

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tube and a fluid circulation tube 15, the tubes being formed and arranged for enabling fluid to communicate through one end with the measurement tube and through the other end with a flow adjuster 19, 20 leading towards the outlet tube. Emmons does not disclose an inlet adaptor or that the upper fluid inlet body includes the inlet tube. The use of inlet adaptors and connectors are notoriously well-known by those of ordinary skill in the art of fluid flow in order to connect flow supply lines. (See MPEP § 2144.03). Also, Emmons discloses an upper body and a lower body wherein the lower body is of a one-piece construction that includes multiple component parts, except that the inlet tube is contained in the lower body (See Fig. 1). However, locating the inlet flow tube on the upper body is a design choice and obvious *rearrangement of parts* that would be within the knowledge of one of ordinary skill in the art. (See MPEP § 2144.04). Therefore, at the time the invention was made, it would have been within the knowledge of one of ordinary skill in the art to include in Emmons an inlet flow tube on the upper body.

B. With respect to Claim 5, Emmons discloses that the fluid inlet 12 is substantially perpendicular to the flow measurement tube 14 including the ball 18 (See Fig. 1).

C. With respect to Claim 6, Emmons discloses that the flow measurement tube 14 including the ball is slightly conical (column 1, lines 53-70).

D. With respect to Claim 8, Emmons discloses that the flow measurement tube 14 and the fluid circulation tube 15 have parallel longitudinal axes (See Fig. 1).

6. Claims 2, 4, 12, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmons (US 2,805,573) as applied to claims 1, 5, 6 and 8 above, and further in view of Stoll (US 4,380, 250).

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A. With respect to Claim 2, Emmons discloses the claimed invention, except he does not disclose a single continuous cut out around the disk. Stoll discloses an adjustable flow fluid device including a disk 10 that includes a single continuous cut out 15 around an angular sector having a circular axis of symmetry, the width of the cut out varying gradually with the angle of the radius of intersection of the cutout in order to adjust the fluid flow (column 3, lines 38-55). Therefore, at the time the invention was made, it would have been within the knowledge of one of ordinary skill in the art to include in Emmons a disk having a single continuous cutout in order to adjust the fluid flow.

B. With respect to Claim 4, Stoll discloses an upper fluid inlet body 1 having dimensions that are the same as the dimensions of the lower fluid outlet body 2, the upper fluid inlet body being fixed to the lower body (See Fig. 1 and 4). Stoll does not explicitly disclose the method by which the bodies are joined. However, screwing, gluing, welding and clipping are all notoriously well-known fixing means and would have been within the knowledge of one of ordinary skill in the art. (See MPEP § 2144.03). Therefore, at the time the invention was made, it would have been within the knowledge of one of ordinary skill in the art to include in Emmons fixing the upper and lower bodies by screwing, gluing, welding or clipping.

C. With respect to Claim 12, Stoll discloses a knob 5 for turning the disk 10 so that the holes 8, 13 can be turned to adjust the flow (column 3, line 38 – column 4, line 32).

D. With respect to Claims 13 and 18, Stoll discloses that the hole 9 in the lower part of the body forms the fluid outlet hole, the diameter of the outlet hole being greater than the spacing between at least two holes 8, 13, 14 in the same row in the disk 7, 10, 11, 14

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to assure that the outlet (orifice) is always facing three holes in the disk (column 3, line 35 – column 32).

E. With respect to Claim 15, Stoll discloses that the knob 5 is knurled 25 on its external periphery and projects on at least one face of the body so that it can be turned manually (column 3, lines 27-34).

F. With respect to Claim 17, Stoll discloses the claimed invention, except he does not disclose that the diameter of the disk is small than the diameter of the knob. Stoll does disclose that the diameters of the disks are of substantially the same diameter. (See Fig. 1). Further, the knob and disk diameters would be a design choice dependent on use requirements and would be within the knowledge of one of ordinary skill in the art. (See MPEP § 2144.03). Therefore, at the time the invention was made, it would have been within the knowledge of one of ordinary skill in the art to include in Emmons a knob having a diameter larger than the diameter of the disk.

7. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmons (US 2,805,573) as applied to claims 1, 5, 6 and 8 above, and further in view of Cove, et al. (US 4,360,040).

A. With respect to Claims 3 and 10, Emmons discloses the claimed invention, except he does not disclose that the disk includes perforated holes arranged to provide gradual adjustment of the flow. Cove discloses a flow control device including a disk 14 having perforated holes 40, 42 arranged to provide a gradual adjustment of the fluid flow rate (column 5, line 6 – column 7, line 39). Therefore, at the time the invention was made, it would have been within the knowledge of one of ordinary skill in the art to include in Emmons a disk having perforated holes in order to adjust the fluid flow rate.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Emmons (US 2,805,573) as applied to claims 1, 5, 6 and 8 above, and further in view of Whalen (US 3,812,715).

A. With respect to Claim 7, Emmons discloses the claimed invention, except he does not disclose that the transparent tube 14 includes graduated marking so that a user can see the ball and read the resulting flow. Whalen discloses a tapered tube and float type fluid flowmeter having a transparent wall 1 with graduated marking 3 so that a user can see the position of the float 2 (column 2, lines 45-55). Therefore, at the time the invention was made, it would have been within the knowledge of one of ordinary skill in the art to include in Emmons a transparent wall having graduated markings in order to allow a user to read the resulting flow.

Allowable Subject Matter

10. Claims 9, 11, 14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey D. Mack whose telephone number is (571) 272-2181. The examiner can normally be reached on M-F, 8:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CDM

Corey D. Mack, Esq.
Patent Examiner
Art Unit 2855

September 20, 2004


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